



MINISTRY OF EDUCATION
AND TRAINING

FPT UNIVERSITY

CAPSTONE PROJECT DOCUMENT

iMindMap

Report #6 – User's Manual Documents

iMindMap		
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1. INSTALLATION GUIDE

1.1 Purposes

This document contains guidelines for user to installing this application to use it.

1.2 Environments

Hardware required for using this application

Name	Purpose	Detail
iPad	Device for using application	<ul style="list-style-type: none"> RAM and Processor are fixed for each specific device. Memory storage: 16Gb or higher
iPad 2	Device for using application	<ul style="list-style-type: none"> RAM and Processor are fixed for each specific device. Memory storage: 16Gb or higher
iPad 3	Device for using application	<ul style="list-style-type: none"> RAM and Processor are fixed for each specific device. Memory storage: 16Gb or higher
iPad 4	Device for using application	<ul style="list-style-type: none"> RAM and Processor are fixed for each specific device. Memory storage: 16Gb or higher
iPad Air	Device for using application	<ul style="list-style-type: none"> RAM and Processor are fixed for each specific device. Memory storage: 16Gb or higher
iPad Mini	Device for using application	<ul style="list-style-type: none"> RAM and Processor are fixed for each specific device. Memory storage: 16Gb or higher

Table 6-1: Hardware required

1.3 Application installation

1.3.1 Download from App Store

After we upload this application to App Store, user can get iMindMap by downloading and installing through App Store. There are the detailed steps:

- Tap on **App Store icon** in your **iPad screen**
- In the **Search bar**, type **iMindMap**
- **App Store** will display all applications that names matches **iMindMap**
- Tap on the **iMindMap application** with creator is **FFS team**
- **App Store** will display the **detailed information of iMindMap**, tap on **Install** button
- Wait some minutes, **iMindMap** will be downloaded and installed to your iPad

1.3.2 Copy directly to iPad

Users can use this way if their iPad cannot connect to App Store to download and install application. The pre-condition is iPad must has to be jail broken and install iTools application.

- Connect iPad to computer
- Install file **iMindMap.ipa** to iPad through **iTools** application

2. USER'S GUIDE

2.1 Purposes

These guidelines are the instructions of general steps for users to use all functions of iMindMap application

2.2 Functional description

About the functions of i2M application, it has main features of existing app such as create new mind map, open/view mind map, edit mind map, save mind map, delete mind map etc. Besides, it has some extra functions: change language to Vietnamese for Vietnamese users and detect text from images of a book to put into mind map. There are the detailed functions of this application:


- **Create new mind map:** user create a mind map and pass it to MindMap Editor, it has all functions below.
 - Add a branch/Remove a branch
 - Draw relationship between two ideas/Remove relationship between two ideas
 - Change text style: change font size, font name, color...
 - Change background color
 - Get mind map's outline
 - Add image to a root idea or branch
 - Add new image
 - Remove existing image
 - Add link to a root idea or branch
 - Show links
 - Add new link
 - Edit existing link
 - Remove existing link
 - Add note to a root idea or branch
 - Show note
 - Compose new note
 - Edit existing note
 - Remove existing note
 - Add your draw to a root idea or branch
 - Show draw
 - Draw your own picture
 - Edit existing picture
 - Remove existing picture
 - Undo/Redo

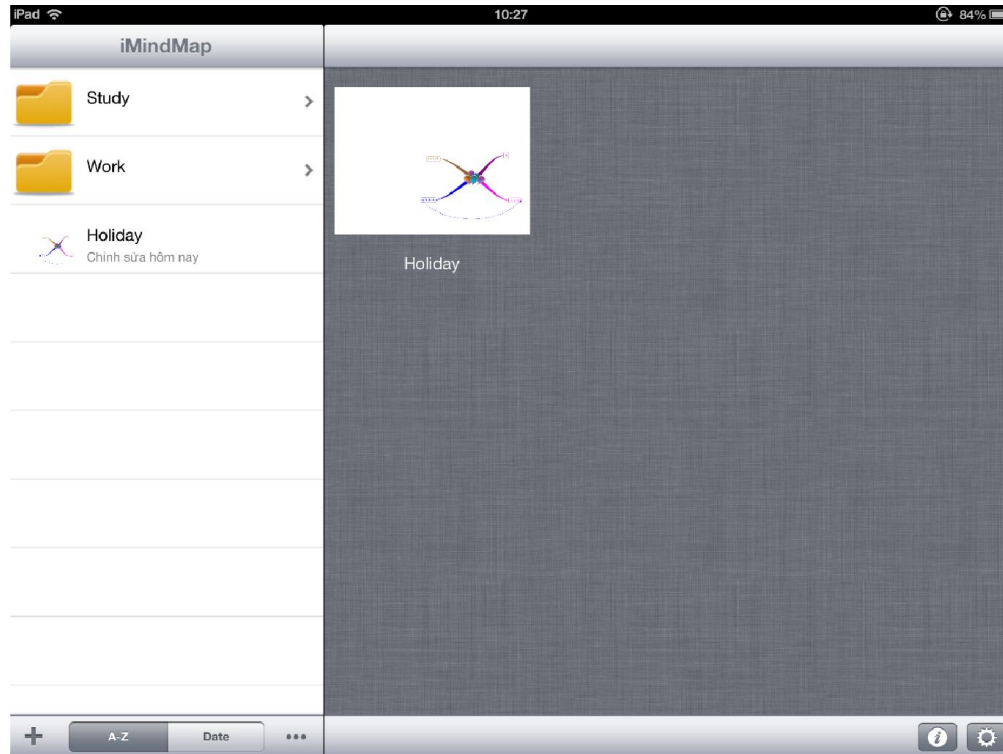
- Collapse/Expand a branch
- Change position of a root idea or branch
- **Open/view existing mind map:** open mind map from storage and view it on screen.
- **Edit existing mind map:** open existing mind map and pass it to MindMap Editor, it has all functions like when you create new mind map.
- **Search mind map:** search mind map stored in iPad's storage by keyword
- **Sort mind map:** sort all mind maps in device storage by alphabet or by modified time
- **Share mind map:** share mind map to some social network such as Facebook, Twitter or send via email
- **Delete mind map:** delete existing mind map stored in device's storage.
- **Save current mind map:** save a mind map on MindMap Editor screen to physical file
- **Detect text from image then add them to an idea:** user can take picture by camera or select image from library to process. After processing, all the detected text will pass to new screen for user to edit and make mind map.
- **Move mind maps or folder to another folder:** user can move mind maps or folder to another folder in device storage
- **Change language:** English (default) or Vietnamese
- **Get feedback from users:** user can send feedback to develop team via email.
- **Help:** help user know clearly how to use all features of this application.

2.3 Detailed guidelines

2.3.1 UC001: Application management

2.3.1.1 UC001-01 Change language

- Tap on **Setting** button () in the right bottom of **Home Screen**



- Tap on button **Vietnamese** or **English** as you want

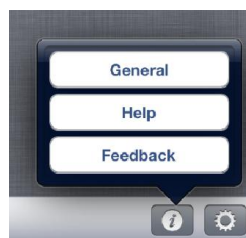


2.3.1.2 UC001-02 Show general information of application

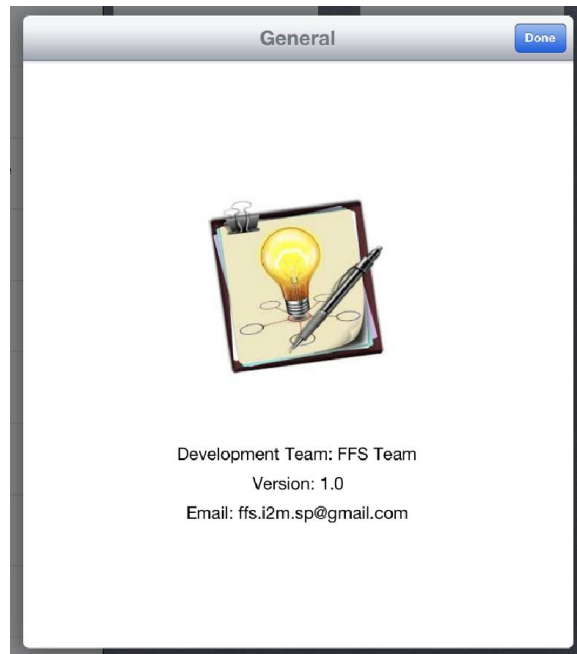
- Tap on **Help** button (i) in the right bottom of **Home Screen**



- Tap on **General** option



- Display **general information** of application

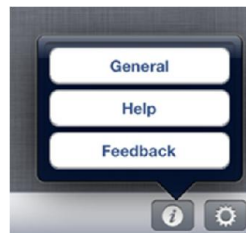


2.3.1.3 UC001-03 Feedback

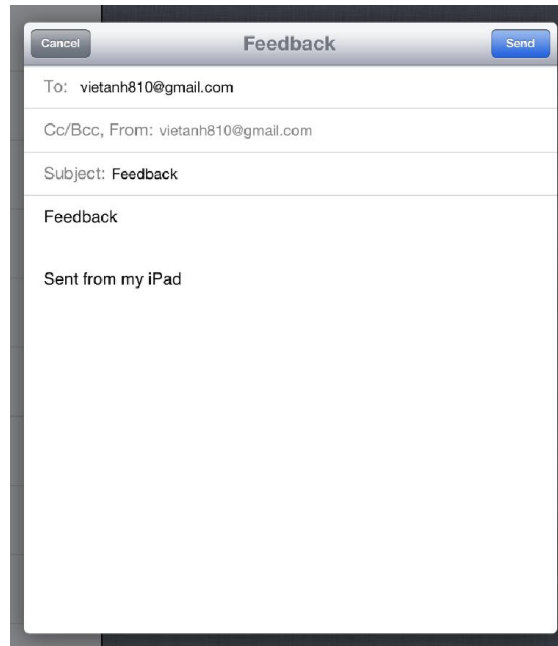
- Tap on **Help** button (i) in the right bottom of **Home Screen**



- Tap on **Feedback** option



- Type **your feedback** into textbox and tap on **Send** button after finishing

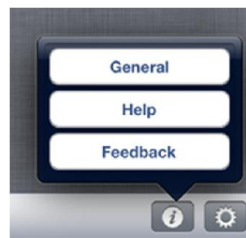


2.3.1.4 UC001-04 Help

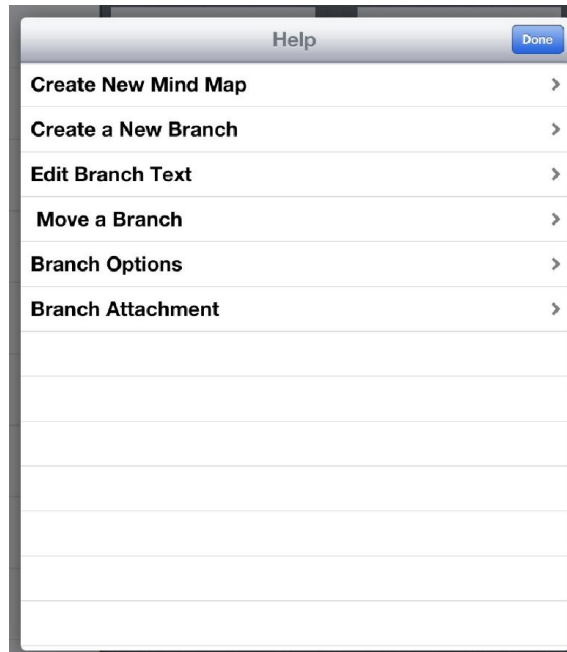
- Tap on **Help** button (ⓘ) in the right of button bar in **Home Screen**



- Tap on **Help** option



- Display all **user instructions** of application



2.3.2 UC002: Mind map management

2.3.2.1 UC002-01 Create new mind map

- Tap on **Create** button (+) in the left of button bar in **Home Screen**



- Tap on **Mind Map** option



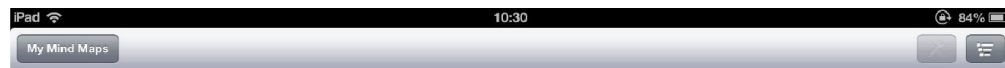
- Type text of root idea into textbox, after finishing, tap on **Create** button



- Choose and **tap on the image** you want to display as **root idea**



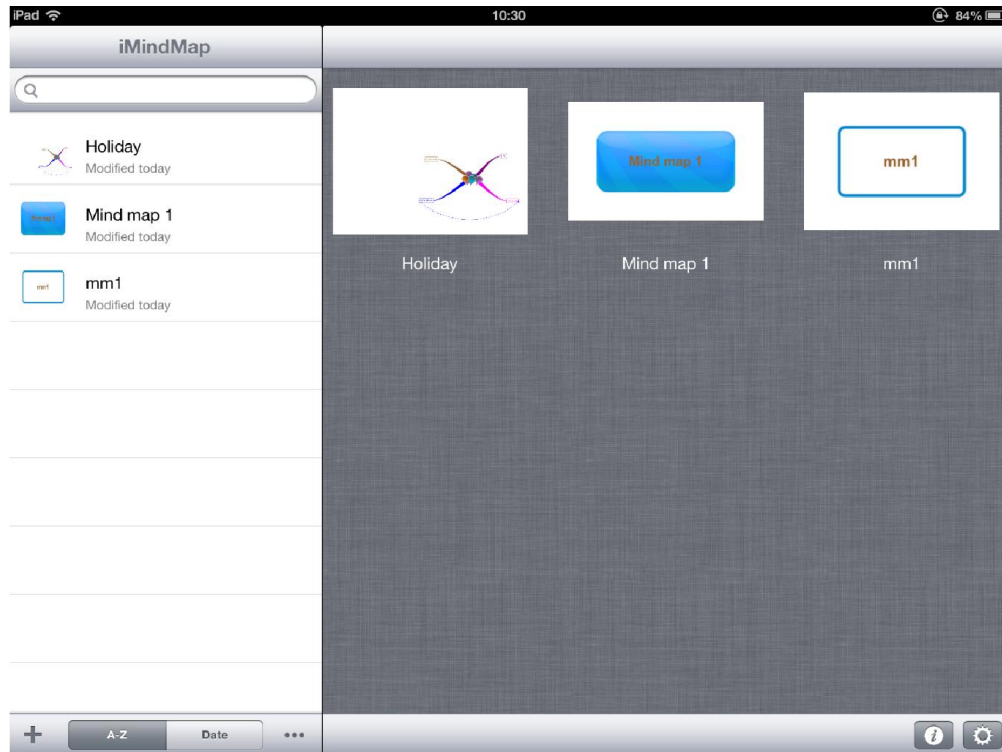
- In the **MindMap Editor Screen**, customize your mind map. Tap on **My Mind Maps** button when finishing



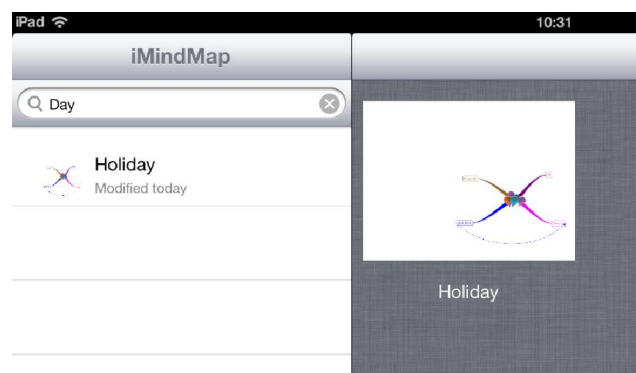
- Your mind map will be **saved** and displayed in **Home Screen**

2.3.2.2 UC002-02 Search mind map

- **Slide the left panel to the right**

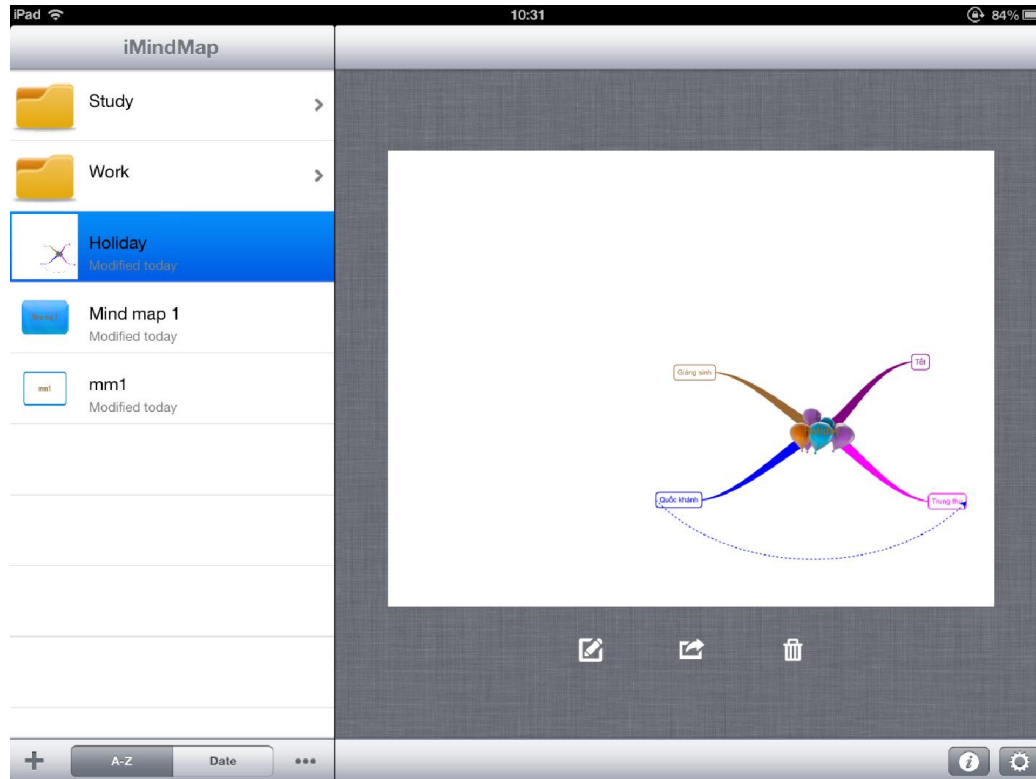


- In **Search bar**, type name of the mind map that you want to search. **Result** will be displayed in the **left panel**



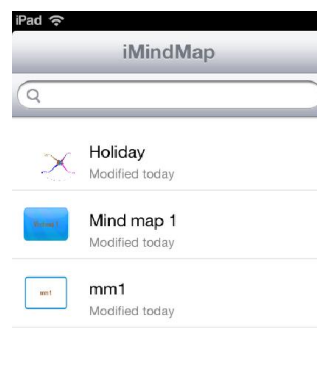
2.3.2.3 UC002-03 Open/View mind map by finding manual

Tap on the mind map that you want to view in the list in left panel. The selected mind map overview will be displayed in the right panel of screen

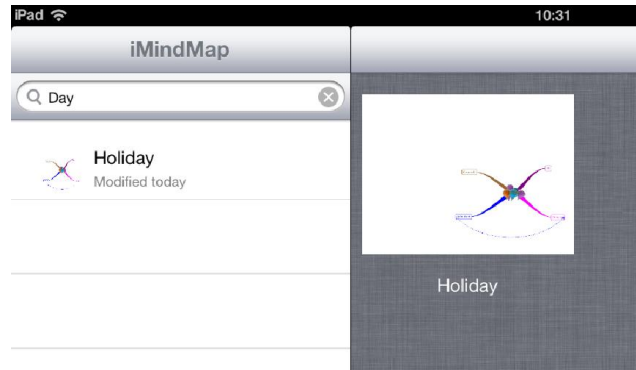


2.3.2.4 UC002-04 Open/View mind map by searching

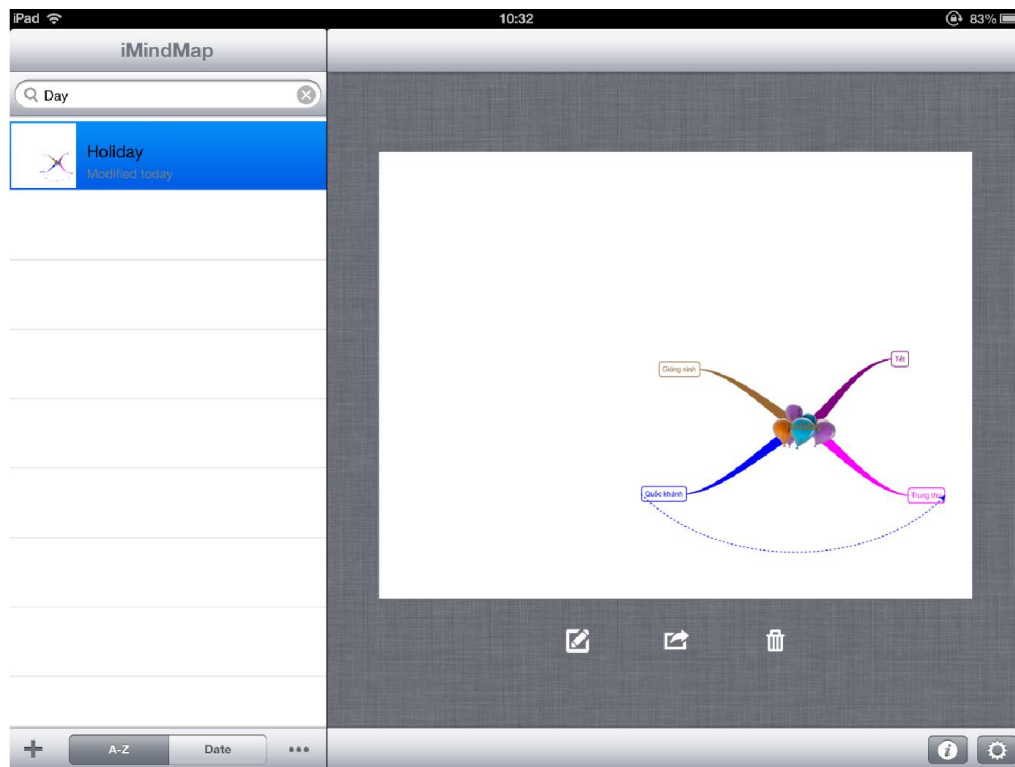
- Slide the left panel to the right



- In Search bar, type name of the mind map that you want to search. **Result** will be displayed in the left panel



- Tap on the mind map that you want to view **in the list in left panel**. The selected mind map overview will be displayed in the right panel in screen

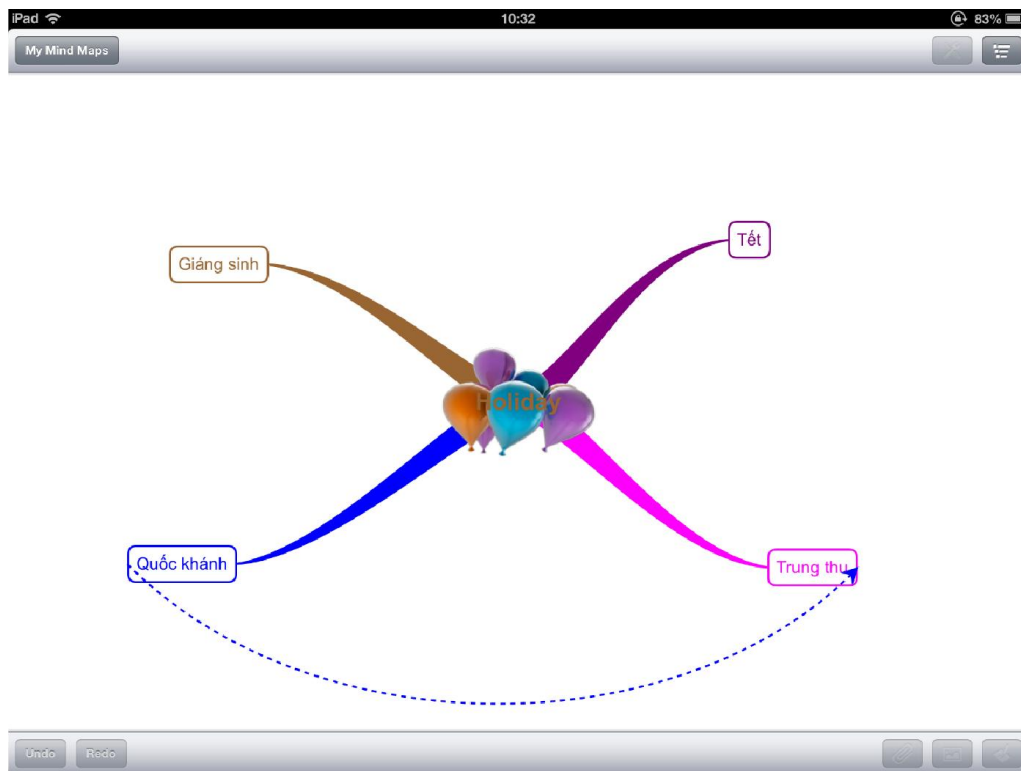


2.3.2.5 UC002-05 Edit mind map

- **Open/View mind map** in the right panel
- Tap on **Edit** button (✎) in the button bar below the overview of mind map



- Your mind map will be passed to **MindMap Editor Screen** for you to edit. After finishing, tap on **My Mind Maps** button to save and return to **Home Screen**



2.3.2.6 UC002-06 Share mind map to social media

- **Open/View** mind map in the right panel
- Tap on **Share** button (✎) below the overview of mind map



- Tap on **Facebook** or **Twitter** icon



- Type **caption of mind map** into textbox then tap on **Post** or **Send** button



2.3.2.7 UC002-07 Share mind map via Email

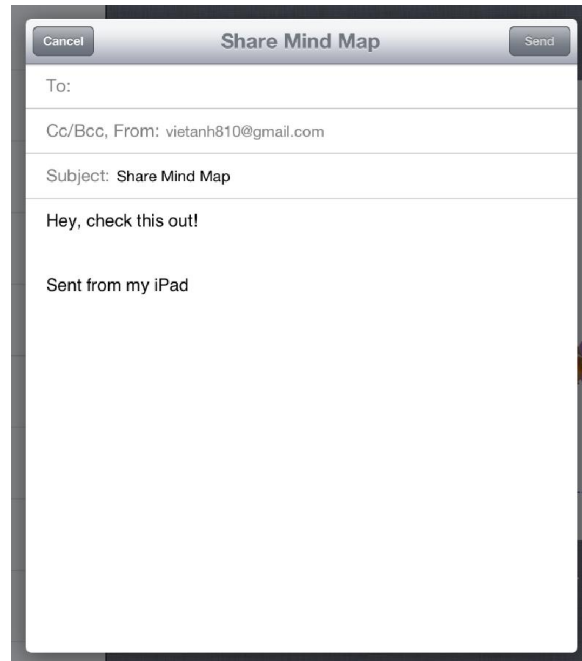
- **Open/View** mind map in the right panel
- Tap on **Share** button (📧) below the overview of mind map




- Tap on **Email** icon



- Type content of email into textbox then tap on **Send** button



2.3.2.8 UC002-08 Delete mind map


- **Open/View** mind map in the right panel
- Tap on **Delete** button () below the overview of mind map

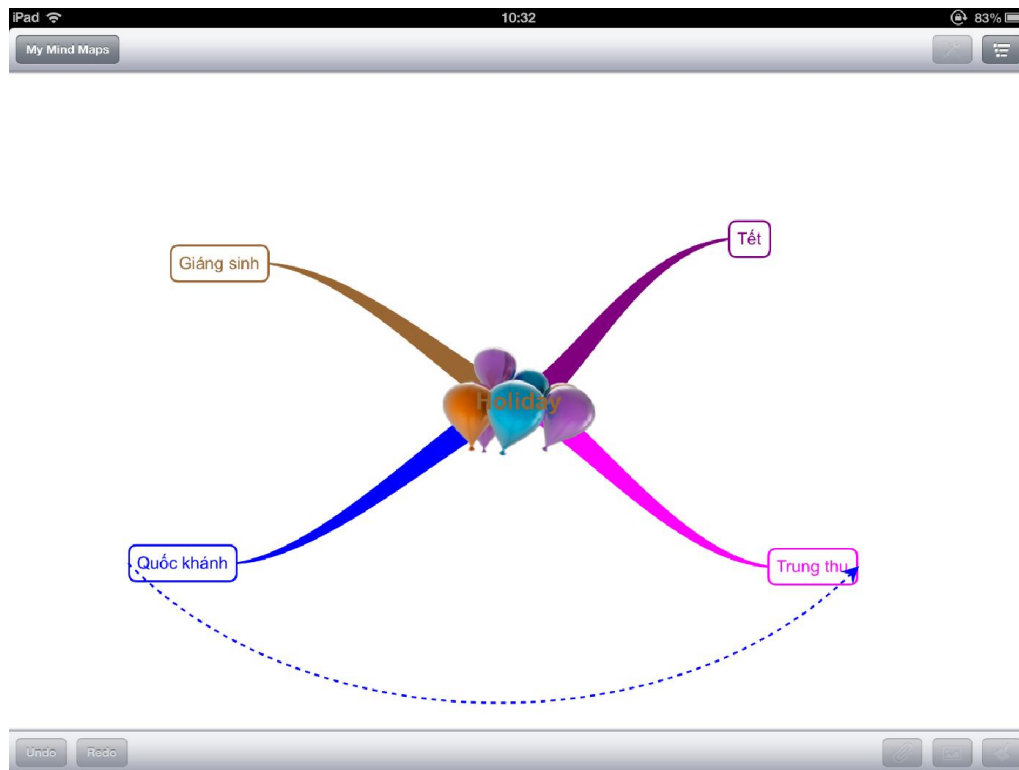


- Application will **display message** “Do you want to delete this mind map?” Tap on **Yes** button




2.3.2.9 UC002-09 Save mind map

In the **MindMap Editor Screen**, when you finish creating or editing mind map, tapping on **My Mind Maps** button (), the mind map will be **saved**



2.3.2.10 UC002-10 Sort mind maps

- If you want to **sort mind map by name**, tap on **A-Z** button () in the left of button bar in bottom of **Home Screen**

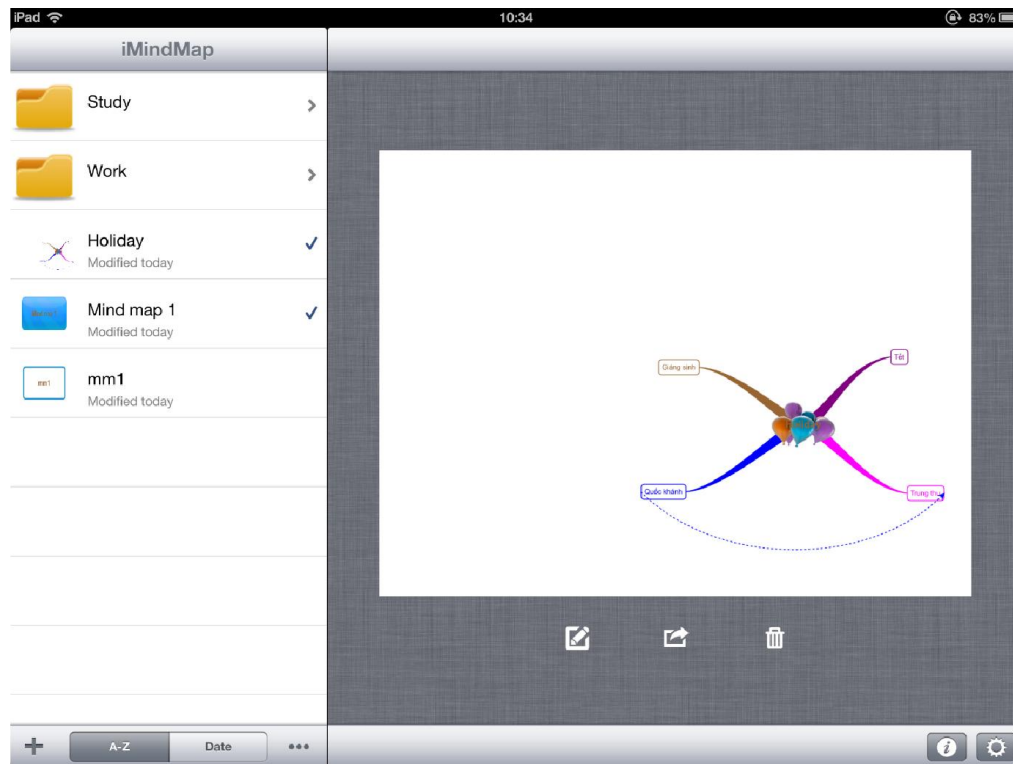


- If you want to **sort mind map by modified time**, tap on **Date** button () in the left of button bar in bottom of **Home Screen**



2.3.2.11 UC002-11 Move mind maps/folder to another folder

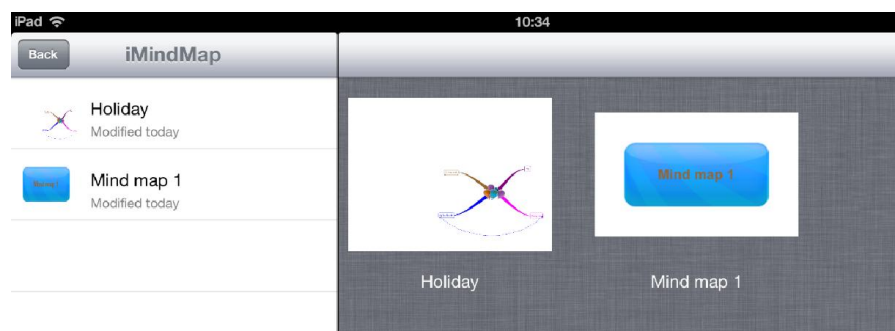
- Long tap** on the mind maps or folder that you want to move until it appears ✓ icon after it



- Tap on **More** button (...), choose **Cut** option



- Go to destination folder, tap on **More** button, choose **Paste** option, the selected mind maps or folders will be moved to it.



2.3.2.12 UC002-12 Detect text from image

- Tap on **Create** button (+) in the left of button bar in **Home Screen**



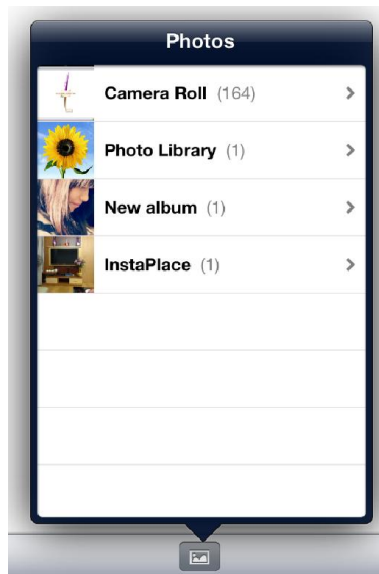
- Tap on **Generate From Image** option



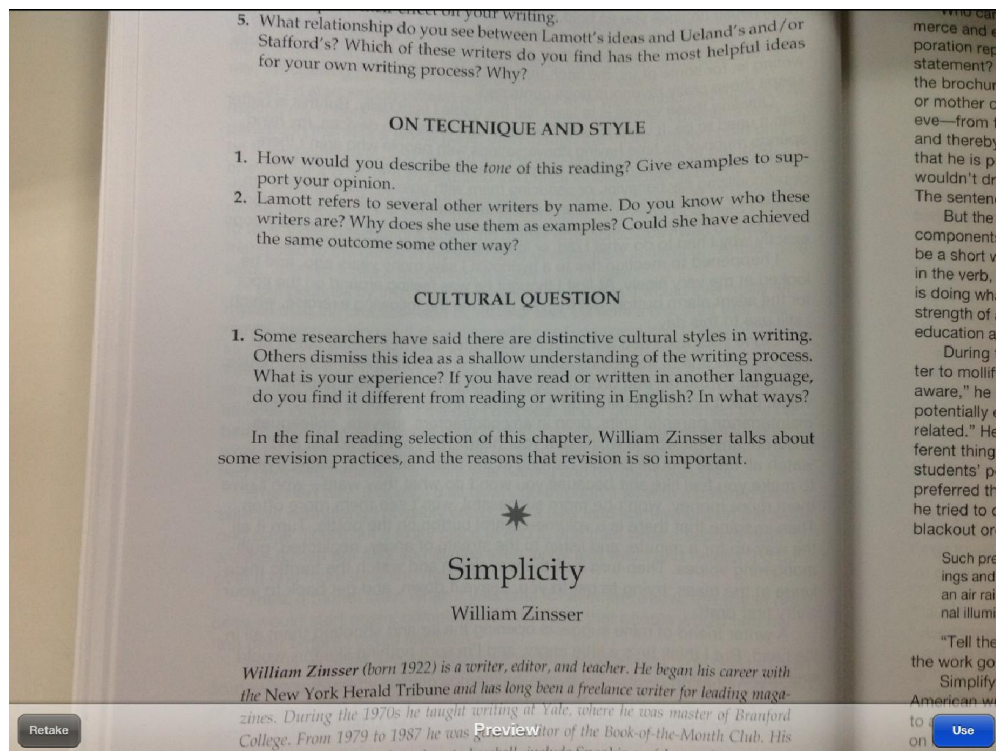
- In the new screen, tap on **Choose From Library** if you want to detect text from image in device storage, tap on **Take Photo** if you want to take photo and detect text from it



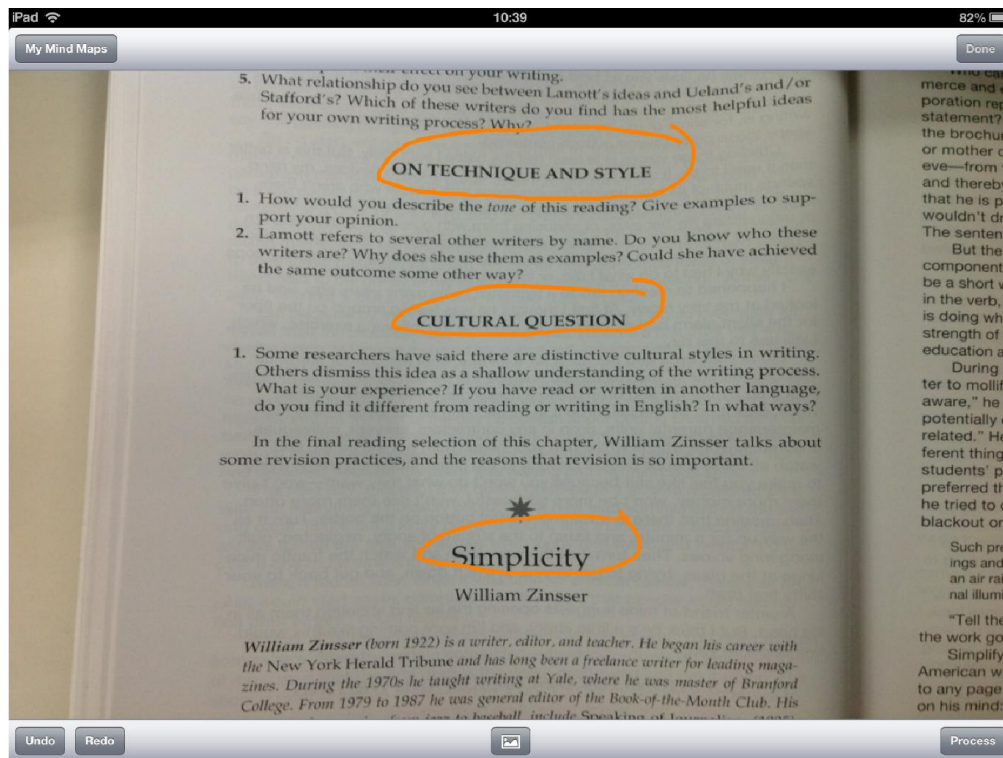
- If you choose **Choose From Library** option, application will display list of folders and files in storage. Find and tap on the image file you want



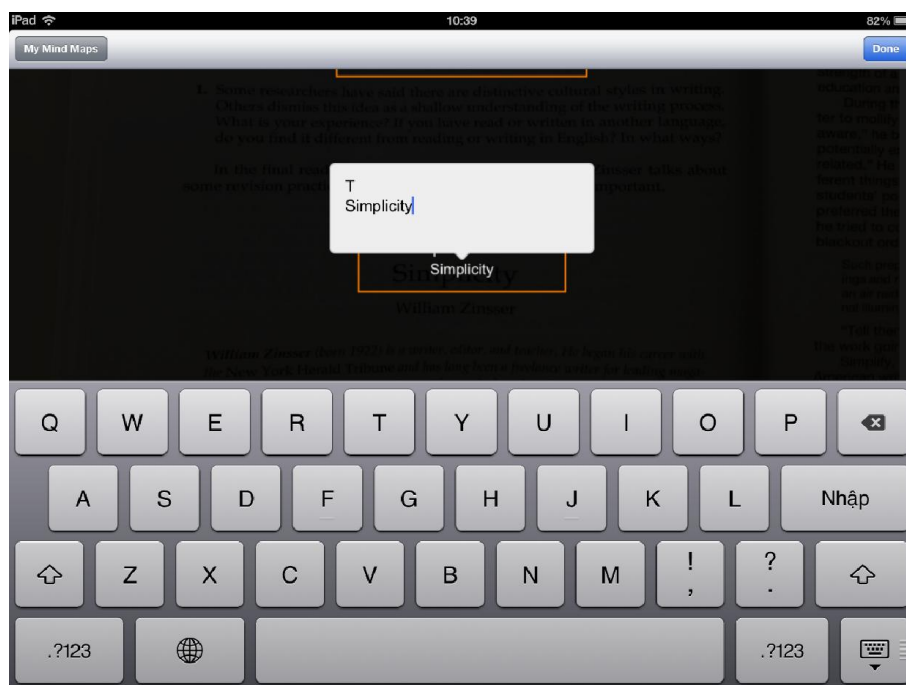
- If you choose **Take Photo**, it will display camera screen, move the camera and tap on **Capture** button when having a pleasant picture. After that, this photo will display in screen, tap on **Use** button if you want to use it, tap on **Retake** button if you want to retake photo



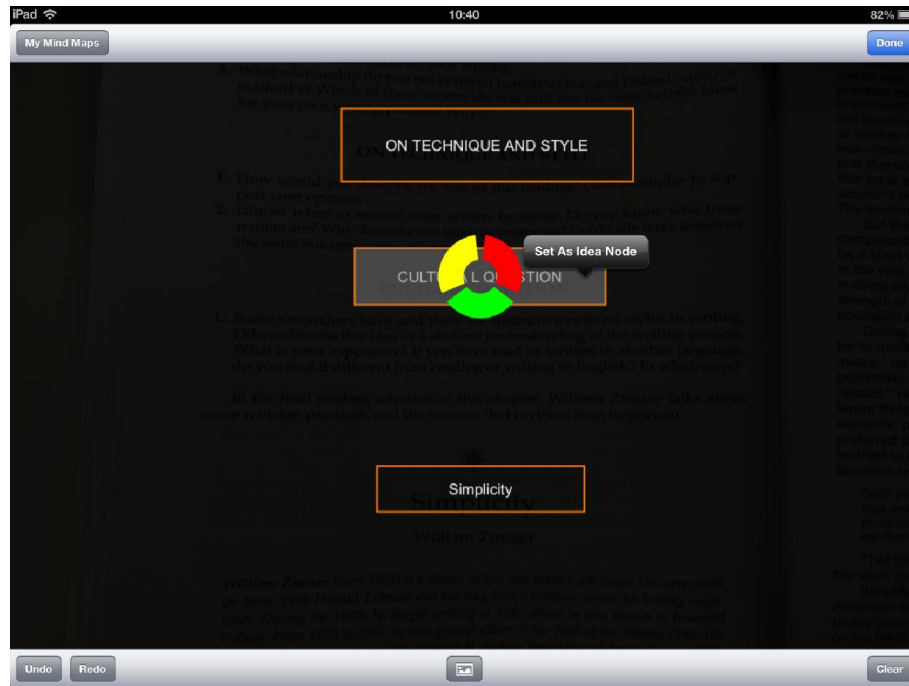
- After choosing the image you want, **circle** on text you want to make mind map. After finishing, tap on **Process** button



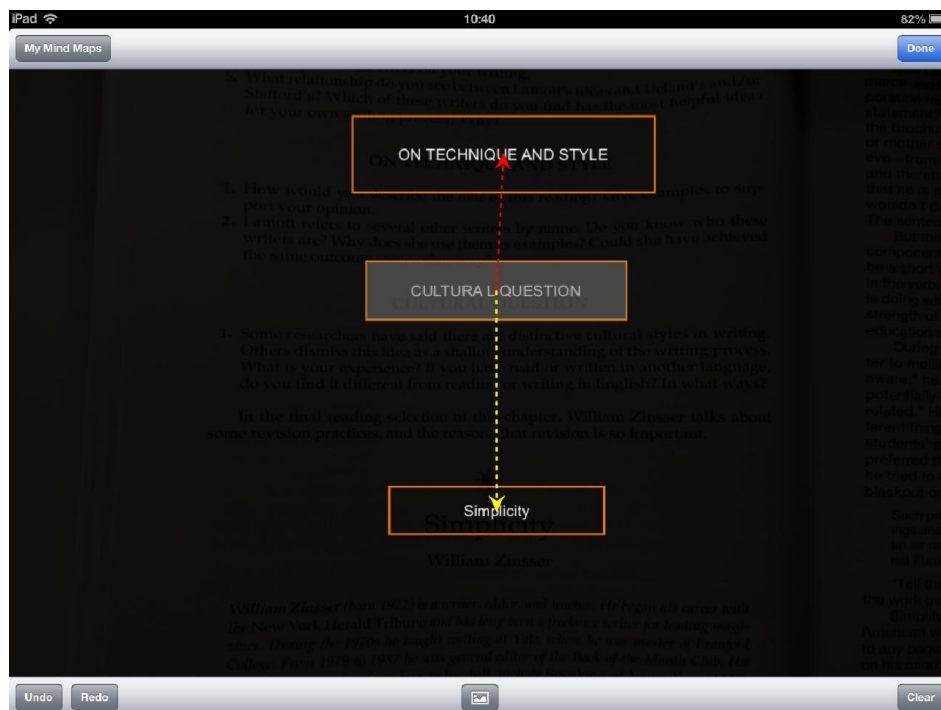
- Text will be displayed in screen, **double tap on box** if you want to edit text



- **Long tap** on the box that you want to make it **root idea**, tap on **Set As Idea Node** button



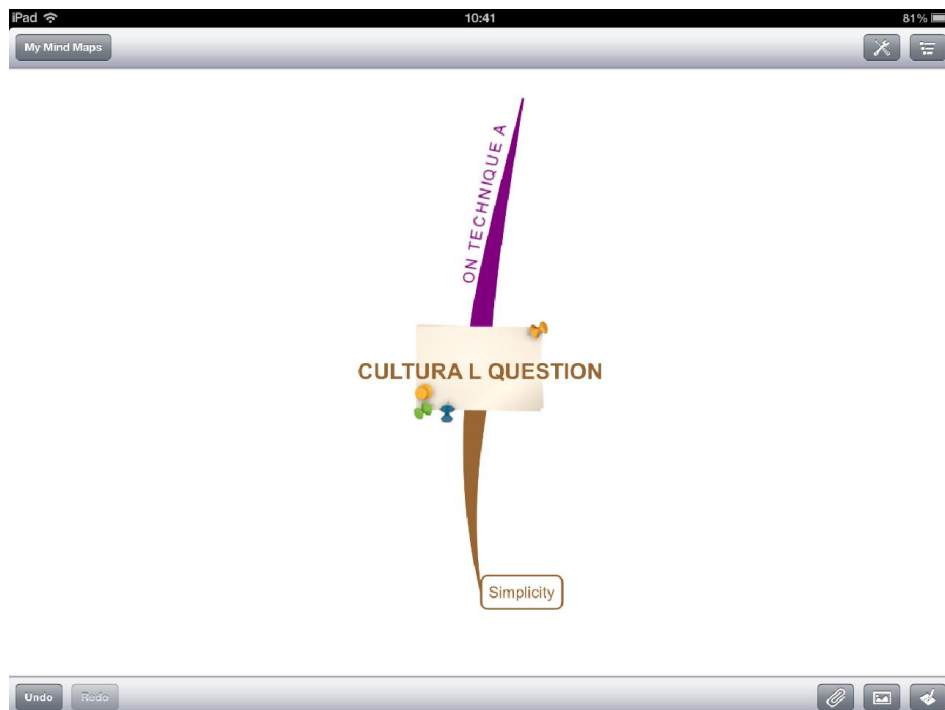
- Tap and move the **red part** or **yellow part** of circle to **link to other branches**, use **green part** to make **connection line**. After finishing, tap on **Done** button.



- Tap on the **image** you want to set as **root idea**



- Your mind map will be created and display in **MindMap Editor Screen**



2.3.2.13 UC002-13 Create new folder to store mind maps

- Tap on **Create** button (+) in the left of button bar in **Home Screen**



- Tap on **Folder** option



- Type folder name into textbox, then tap on **Create** button



2.3.3 UC003: Mind map editor

2.3.3.1 UC003-01 Add new branch

- Tap on the root idea or branch, it will display a **circle with 4 colored parts: red, yellow, green and blue**



- Create new branch with **text along the connection line**:
 - Tap and hold on the **red part**, move to the position that you want to put new branch

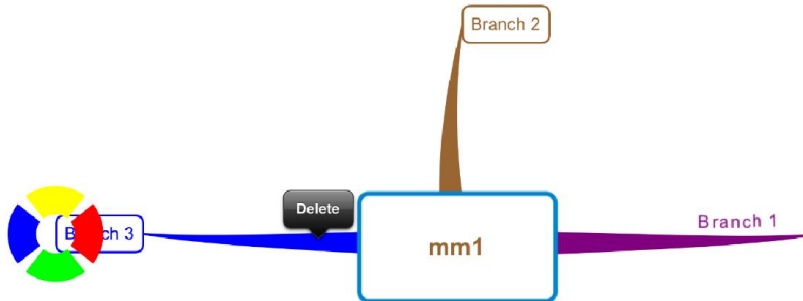


- Type branch text into the textbox, after finishing, tap on any position out of textbox
- Create new branch with **text in the rectangle at the end of connection line**

- Tap and hold on the **yellow part**, move to the position that you want to put new branch
- Type branch text into the textbox, after finishing, tap on any position out of textbox

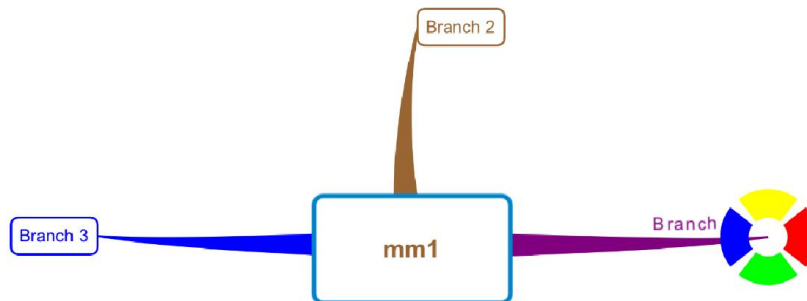
2.3.3.2 UC003-02 Remove existing branch

Long tap on the **branch** that you want to remove, tap on **Delete** button

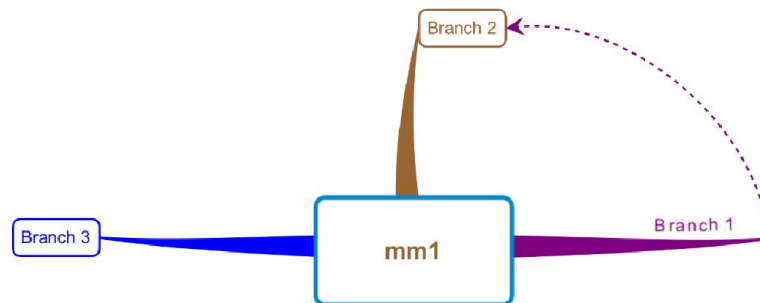


2.3.3.3 UC003-03 Add new connection line

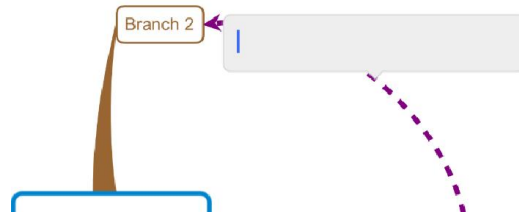
- Tap on the **branch** that you want to connect it with the other



- Tap and hold on the **green part**, move to the destination branch

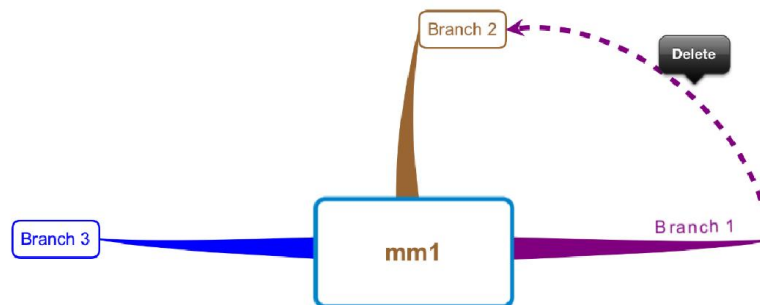


- **Double tap** on the connection that has been created recently. Input text of connection line into textbox, tap on **any position out of textbox** after finishing



2.3.3.4 UC003-04 Remove existing connection line

Long tap on the **connection line** that you want to remove, tap on **Delete** button



2.3.3.5 UC003-05 Change text style

2.3.3.5.1 UC003-05-01 Change text size

- Tap on the **root idea, branch or connection line** that you want to change text size
- Tap on **Setting** button (⚙️), in the **Font Size** field, change to the value you want
 - If tap on **root idea**



- If tap on **branch**



- If tap on **connection line**



2.3.3.5.2 UC003-05-02 Change text font

- Tap on the **root idea, branch or connection line** that you want to change text size
- Tap on **Setting** button (✂️), tap on **Font Name** field
 - If tap on **root idea**



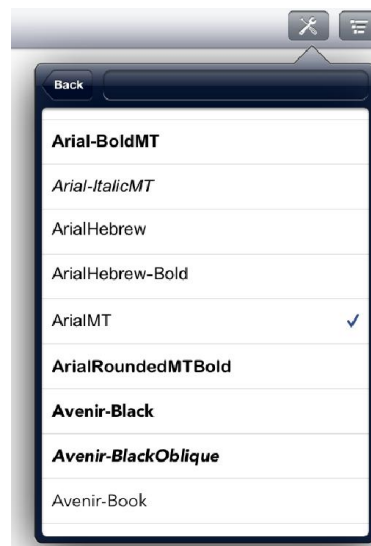
- If tap on **branch**



- If tap on **connection line**



- Tap on font that you want to change



2.3.3.5.3 UC003-05-03 Change text color

- Tap on the **root idea, branch or connection line** that you want to change text size
- Tap on **Setting** button (🔧), tap on **Color** field
 - If tap on **root idea**



- If tap on **branch**



- If tap on **connection line**



- Tap on color that you want to change



2.3.3.6 UC003-06 Change background color

- Tap on **the root idea**, tap on **Setting** button then tap on **Background Color** field




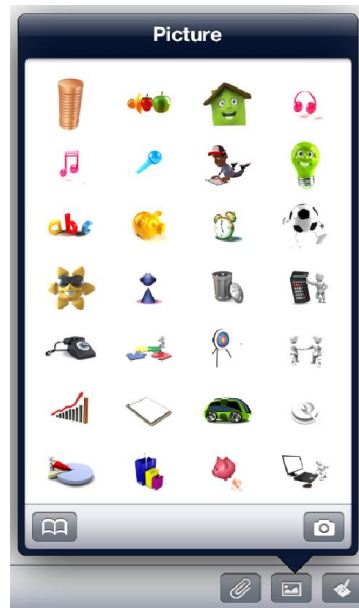
- Tap on **the color you want** in color picker



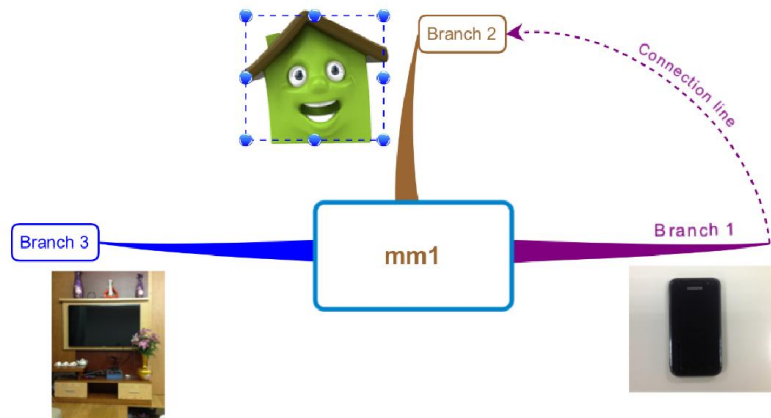
2.3.3.7 UC003-07 Add new image to a root idea or branch

2.3.3.7.1 UC003-07-01 Add new image from library of application

- Tap on the **root idea or branch** that you want to attach image, tap on **Image** button () in the right bottom of screen

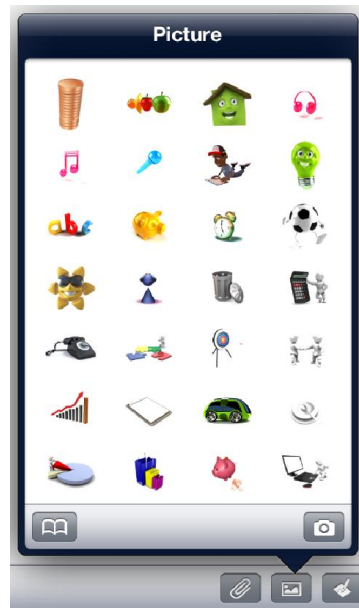



- **Choose and tap on** the image that you want to attach, it will display beside the selected root idea or branch



2.3.3.7.2 UC003-07-02 Add new image by taking picture

- Tap on the **root idea or branch** that you want to attach image, tap on **Image** button (🖼️) in the right bottom of screen
- Tap on **Take Picture** button (📷)



- Move the camera around until you find a pleasing image, and then tap the **Capture** button () at the bottom center of the screen



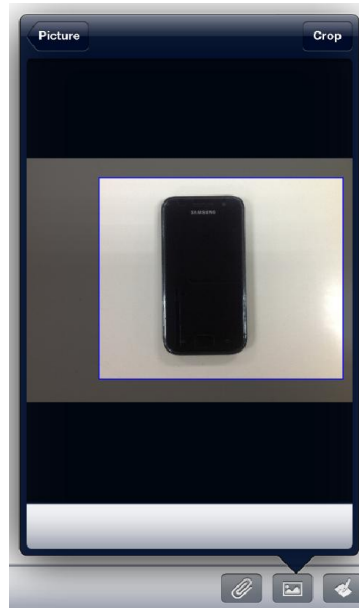
- Tap on **Use** button if you want to use this image, tap on **Retake** button if you want to retake photo



- Tap on **Crop** button () if you want to crop picture, tap on **Done** button if you want to attach this currently image



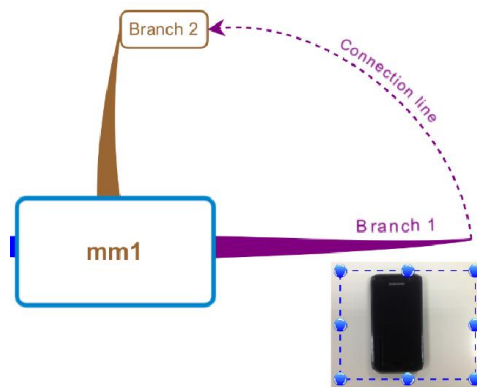
- Crop picture like you want, tap on **Crop** button in the top of window



- If the picture is as you want, tap on **Done** button.

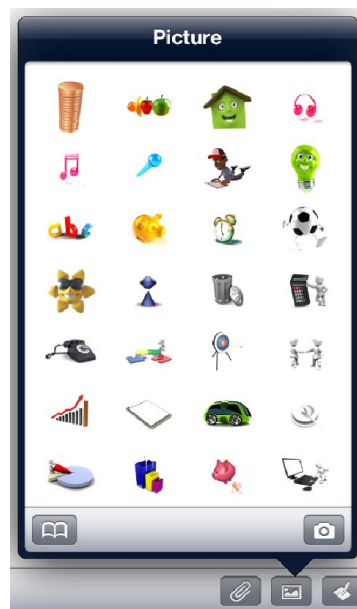


- This picture will be attached to this idea

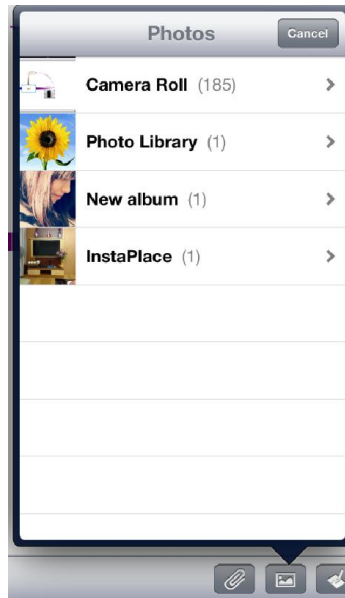



2.3.3.7.3 UC003-07-03 Add new image from library of device

- Tap on **root idea or branch** that you want to attach image, tap on **Image** button (🖼️) in the left bottom of screen
- Tap on **From Library** button (📖)



- **Find and tap** on the image that user wants to attach



- If you want to crop picture, tap on **Crop** button () in the bottom of screen



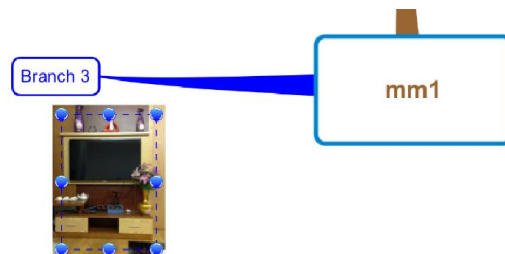
- Crop picture like you want, tap on **Crop** button in the top of screen



- If the picture is as you want, tap on **Done** button. This picture will be attached to this idea



- This picture will be attached to this idea



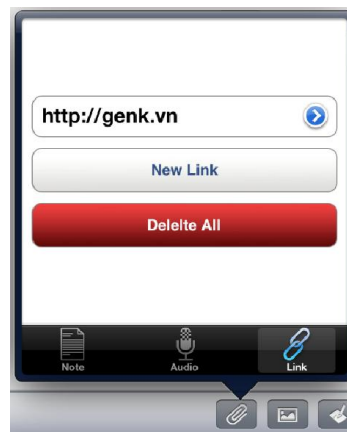
2.3.3.8 UC003-08 Delete image attached to a root idea or branch

- **Long tap** on the image of **the root idea or branch** that you want to delete
- Tap on the red “x” icon



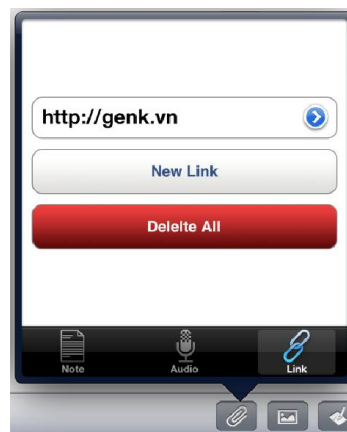
2.3.3.9 UC003-09 Show links that attached to a root idea or branch

- Tap on **the root idea or branch** that you want to show links of it
- Tap on **Attach** button, choose **Link Tab**, it will display all links attached to this root idea or branch



2.3.3.10 UC003-10 Add new link to a root idea or branch

- Tap on **the root idea or branch** that you want to add link to it
- Tap on **Attach** button (📎), choose **Link Tab**, tap on **New Link** button

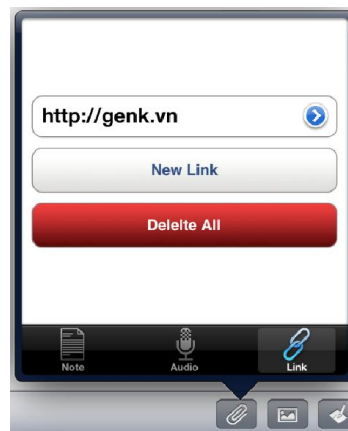


- Type link in the textbox, tap on **Insert** button

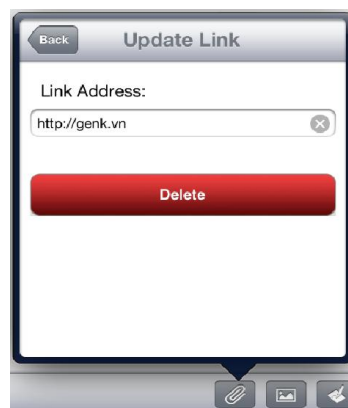


2.3.3.11 UC003-11 Edit link that attached to a root idea or branch

- Tap on **the root idea or branch** that you want to edit link of it
- Tap on **Attach** button (📎), choose **Link Tab**, tap on the ➡ icon in selected link

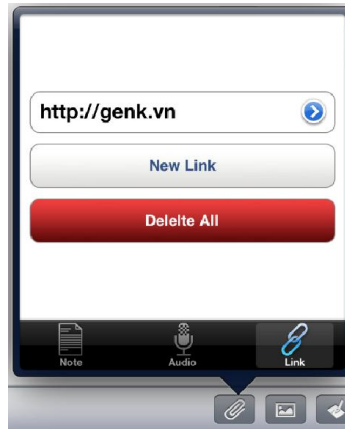


- Edit the link, tap on **Back** button, it will save the edited link



2.3.3.12 UC003-12 Go to website in the link attached to a root idea or branch

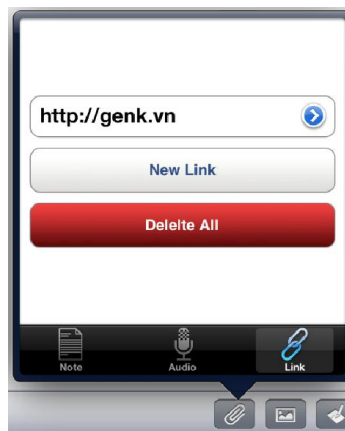
- Tap on **the root idea or branch** that you want to go to website in the link of it
- Tap on **Attach** button (📎), choose **Link Tab**, tap on the selected link



2.3.3.13 UC003-13 Delete link attached to a root idea or branch

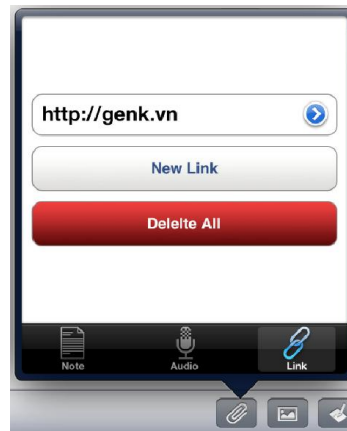
2.3.3.13.1 UC003-13-01 Delete all links attached to a root idea or branch

- Tap on **the root idea or branch** that you want to delete all links of it
- Tap on **Attach** button (📎), choose **Link Tab**, tap on **Delete All** button

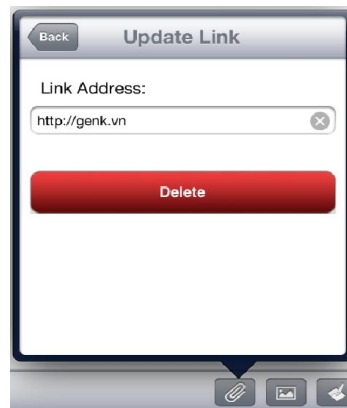


2.3.3.13.2 UC003-13-02 Delete one link attached to a root idea or branch

- Tap on **the root idea or branch** that you want to delete link of it
- Tap on **Attach** button (📎), choose **Link Tab**, tap on the 🔗 icon in selected link

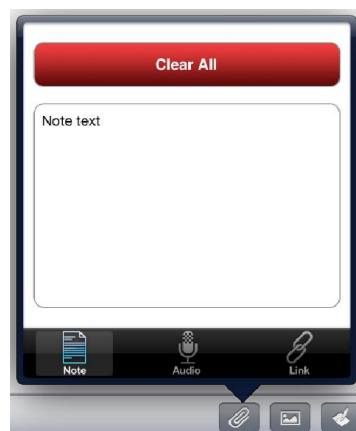


- Tap on **Delete** button



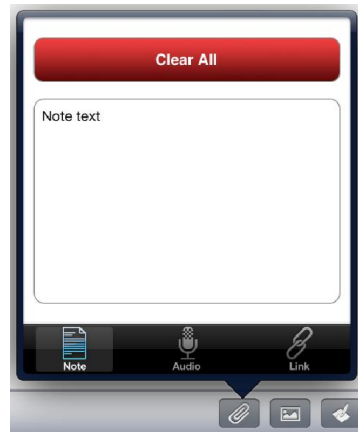
2.3.3.14 UC003-14 Show note attached to a root idea or branch

- Tap on **the root idea or branch** that you want to show note of it
- Tap on **Attach** button (📎), choose **Note Tab**



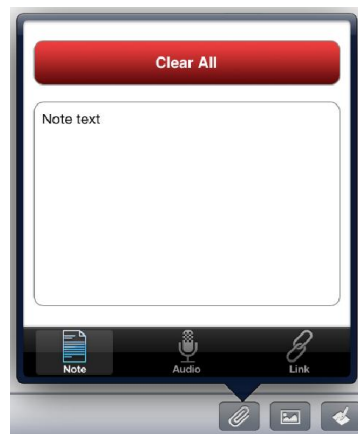
2.3.3.15 UC003-15 Add new note to a root node or branch

- Tap on **the root idea or branch** that you want to add note to it
- Tap on **Attach** button (📎), choose **Note Tab**, type note in the textbox, after finishing, tap on **any position of screen outside Note Tab**

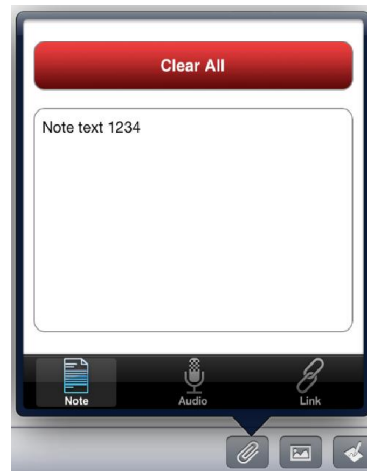


2.3.3.16 UC003-16 Edit note attached to a root idea or branch

- Tap on **the root idea or branch** that you want to edit note of it
- Tap on **Attach** button (📎), choose **Note Tab**

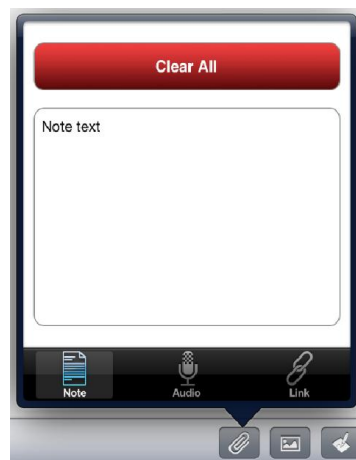


- **Edit note in the textbox**, after finishing, tap on **any position of screen outside Note Tab**, it will save the edited note



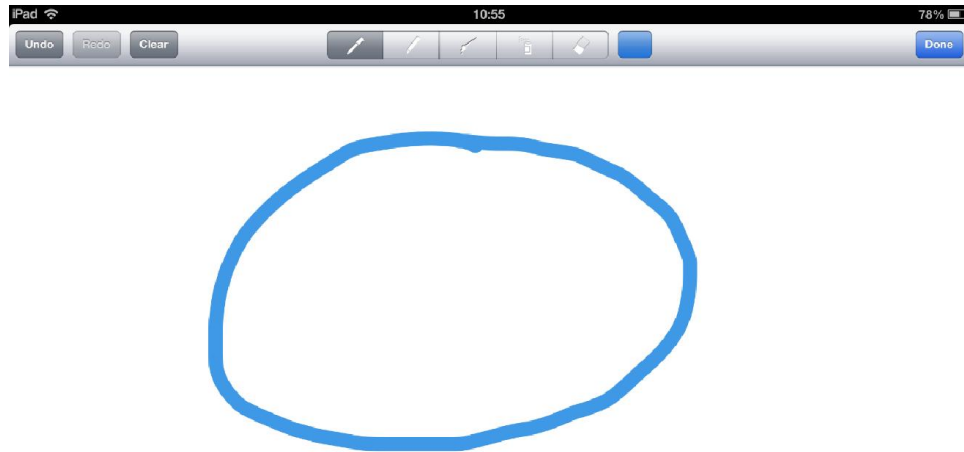
2.3.3.17 UC003-17 Delete note attached to a root idea or branch

- Tap on **the root idea or branch** that you want to delete note of it
- Tap on **Attach** button (📎), choose **Note Tab**, tap on **Clear All** button



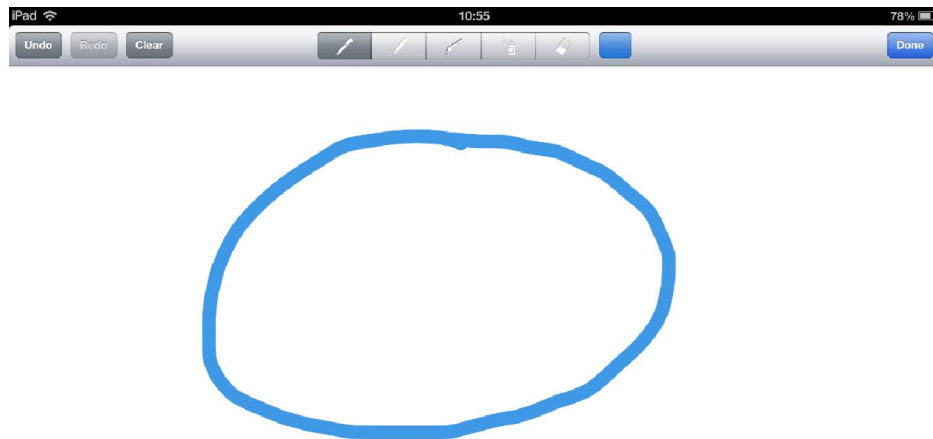
2.3.3.18 UC003-18 Show draw attached to a root idea or branch

Tap on **the root idea or branch** that you want to add draw to it, tap on **Draw** button (🖋️) in the bottom left of screen



2.3.3.19 UC003-19 Add new draw to a root idea or branch

- Tap on **the root idea or branch** that you want to add draw to it, tap on **Draw** button (👉) in the bottom left of screen. Draw and customize draw, after finishing, tap on **Done** button, it will save the draw



2.3.3.20 UC003-20 Edit existing draw attached to a root idea or branch

- Tap on **the root idea or branch** that you want to edit draw of it, tap on **Draw** button (👉) in the bottom left of screen
- Edit draw, after finishing, tap on **Done** button



2.3.3.21 UC003-21 Delete existing draw attached to a root idea or branch

- Tap on **the root idea or branch** that you want to add draw to it, tap on **Draw** button (👉) in the bottom left of screen
- In **Draw Screen**, tap on **Clear** button



2.3.3.22 UC003-22 Undo

Tap on **Undo** button in the left bottom of screen



2.3.3.23 UC003-23 Redo

Tap on **Redo** button in the left bottom of screen



2.3.3.24 UC003-24 Collapse a branch

Tap on a **branch** that you want to collapse, tap on **Setting** button (⚙️). Change the status of **Collapse** option to **ON**



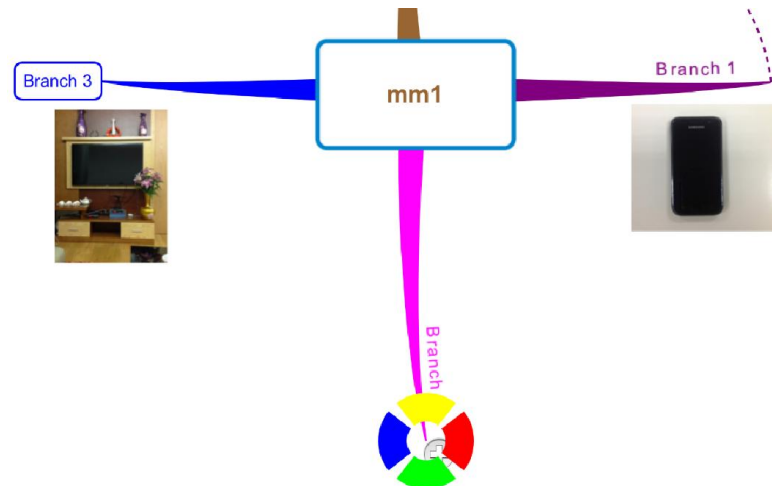
2.3.3.25 UC003-25 Expand a branch

Tap on a **branch** that you want to collapse, tap on **Setting** button (⚙️). Change the status of **Collapse** option to **OFF**

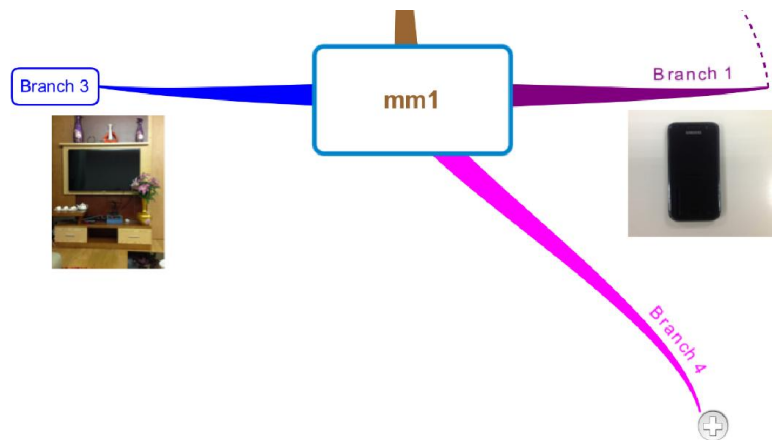


2.3.3.26 UC003-26 Change position of a root idea or branch

- Tap on a **root idea or branch** that you want to change position



- Tap, hold on **blue part** in the circle and move it to the position that you want to change



2.3.3.27 UC003-27 Get outline of mind map

Tap on **Outline** button (☰) in the right top of **MindMap Editor Screen**

3. PROJECT RESULT REPORT

3.1 Product judging

3.1.1 Advantages of iMindMap

The idea of the iMindMap is to develop a new product that inherits the advantages and improve issues and learns from other products. In addition, the new product would have the opportunity to add many enhancements. After installing iMindMap, users can get many benefits from it

- Users do not need to pay money for using this app. It is completely free for all users.
- For Vietnamese users who do not know English well, they can easily use i2M with Vietnamese language.
- Users can use i2M to work with their mind maps with all main and important features.
- For students or researchers who have to read lots of books and documents, they can use “Generate text from image” function to save time.

3.1.2 Current limitations of iMindMap

However, some limitations still exist

- Because of the short time, we cannot up out application to App Store, so user cannot download it from App Store to use, they can only use by copying directly.
- Some GUI are still upgrading.
- In MindMap Editor Screen, some functions are not smooth as expected.

3.1.3 Expectation in future

- We will upload our application to App Store, so users can easily download and install to use it
- Continuously develop application, improve the way it interacts with users
- Edit the design more attractive

3.2 Project summary

Project Title		iMindMap	
Project Supervisor		Nguyễn Văn Sang	
Committers (5)			
1	Project Manager	Đinh Thị Việt Nga	Ngadtv00533@fpt.edu.vn
2	Project Technical Leader	Trần Trung Kiên	Kientt01868@fpt.edu.vn

3	Developer	Nguyễn Việt Anh	Anhnn01758@fpt.edu.vn
4	Developer	Nguyễn Tự Dũng	Dungnt01877@fpt.edu.vn
5	Tester	Trần Công Minh	Minhtc01748@fpt.edu.vn
Main objective		develop an iOS application that helps users to create, manage and work with their mind maps	
Purpose		provide a free and Vietnamese supported application for Vietnamese users	
Items		Plan	Actual
Releases Date		17/12/2013	17/12/2013
Releases version		1.0	1.0
Days		100	100
Test cases + checklists			2426
Defects			7
Document pages		200	297
Lines of code			Approximately 15.000

Table 6-2: Project summary

3.3 Lessons learned

- Before this capstone project, we do not know much about iOS and Objective C language. After more than 3 months, we have more experiences and deeply understand how to create an iOS application, how to face with problems and bugs in developing iOS application.
- We also improved lots of skills
 - Firstly, about technical, we know how to develop application with Objective C language, how to use SVN to store source code and how to work efficiently with Microsoft Office.

- Secondly, about soft skills, while doing this project, we can gain skills in how to work with team efficiently, how to avoid conflict in team members. After lots of team meeting, we know how to brainstorm with all team to generate creative idea or solution to a problem. In addition, two important skills are researching and self-studying, we have to research and self-study a lot to do our work in project, to solve a problem.
- Finally, one of the most important skill we have learnt through this project is project management. We know how to manage a project from the beginning to the end, how to create project plan, how to collect requirements, how to create SRS, how to design an application, how to create test cases etc. It is very important for our job in the future.
- Through this capstone project, we have more experiences in risk and issues management
 - About technique :
 - No members have experiences work with iOS before start this project so we assign some members to take responsibility for researching and training the others.
 - Members do not understand about some general techniques such as searching in internet or asking for supporting from community. We have to support to guide each other to work efficiently.
 - About human resources:
 - Some members are lazy for a while; they cannot finish their work before deadline or cannot do their tasks so we define detail schedules, and often reminding each other.
 - Some member was ill for some days, cannot join the project so the others (who have free time) replaced him for these days.
 - Members were lack of project information, so we use many methods to prevent this issue; we use the general SVN for everyone to keep up with the project.
 - We held lots of team meeting for team members to meet each other, to brainstorming to think about solution of a problem and to support other members.
 - Team members must report what they do twice a week and project manager has to define schedule according to members' capability.
 - About the missing deadline, there are some reasons
 - The coding language is new with us, so we need more time to be acquainted with it.
 - Sometimes source code has problems and members cannot check in, check out to submit their works
 - There are some conflicts between team members; they lead to the waste of time.

- Some members do not pay attention at the beginning, so they must spend more time to keep up with other members.
- Some members are lazy; they do not do their works, always miss deadlines.
- Lack of device is one problem; we do not enough iPad for each member to do their tasks, so maybe they cannot finish their works on time.